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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		060546	
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		First Named Inventor <u>Tamoichiro Tamura</u>	
		Art Unit <u>3744</u>	Examiner <u>Michael Carton</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the		<u>Nick Bromer</u> Signature	
<input type="checkbox"/>	applicant/inventor.	<u>Nicholas Bromer</u> Typed or printed name	
<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		
<input checked="" type="checkbox"/>	attorney or agent of record. Registration number <u>33,478</u>	<u>202 - 659 -2930</u> Telephone number	
<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	<u>October 15, 2009</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Tomoichiro TAMURA, et al.**

Group Art Unit: **4118**

Serial No.: **10/589,129**

Examiner: **Michael Carton**

Filed: **August 11, 2006**

P.T.O. Confirmation No.: **5766**

Docket: **060546**

Date: **October 15, 2009**

For: **HEAT PUMP APPARATUS AND
OPERATING METHOD THEREOF**

ARGUMENTS for PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

Please consider the following:

(1) The Applicants argued on May 12, 2009, that

The Examiner asserts that the heat exchanger is shown in Fig. 16 and not in Fig. 15; however, these two figures apparently show the same embodiment (see Lanciaux at col. 3, lines 1-16), and only two heat exchangers are seen in Fig. 16 (element 156 is a lint screen). Lanciaux itself mentions no heat exchanger; it states (col. 9, line 22), "The heat pump system 142 comprises a compressor 149, a condenser 150, an evaporator 151, and a thermostatic expansion valve 152 interposed between the condenser and the evaporator."

With respect, there is no actual support for the asserted heat exchanger in Lanciaux, that is, no support for a *third* heat exchanger, in addition to the condenser 150 and evaporator 151.

In the Final Action of September 2, 2009 (second paragraph on page 2), the Examiner states the argument above is not persuasive because the Lanciaux mentions a condenser and evaporator, and these are heat exchangers. However, the Examiner did not consider the Applicant's emphasized word "third".

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The Examiner points to the reproduction of Fig. 16 (on page 4 of the Office Action), on which an arrow indicates the incorrectly-asserted third heat exchanger.

With respect, the Examiner confuses an arbitrary portion of a heat exchanger with the heat exchanger itself. The examiners are invited to consider that a heat exchanger is better defined by the input, the output, and the heat-exchanging portion between, than by the mere shape of a small portion of a heat exchanger—and that is what the indicated portion is.

Under the Examiner's interpretation, *any* section of the heat exchanger 164 could be counted as another "heat exchanger": for example, the individual bights (turns) of the tubing 162 of the heat exchanger 150 could each be asserted as a separate "heat exchanger", and these "heat exchangers" would number five. Using the Examiner's principle, one could also count ten heat exchangers (the two sections of each bight each counting as one "heat exchanger"). Indeed, the number could be made greater, by arbitrary subdivisions of the actual heat exchanger.

The reference itself states, "the condenser 150 [is one of] heat exchangers formed by nested coils of copper or aluminum tubing 162 extending through a stack of spaced apart metallic plates or fins 164. ... As an alternative, either or both of these heat exchangers may be fabricated of embossed metal plates known as 'rollbon'." Thus, the Examiner's asserted distinct "heat exchanger" has no separate reference numeral, and the reference itself gives no indication that the heat exchanger is to be sub-divided. Sub-division comes not from the reference, but from the Examiner.

(2) The Applicants also argued:

... Itoh does not disclose a "circulation duct through which drying air is circulated and in which said radiator, said heat exchanger and said evaporator are

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disposed in this order from an upstream side of flow of the drying air,” as recited in claim 1. Itoh puts the heat exchanger 130 (“radiator”) into an air flow *separate from* the air flow of the and heat exchanger 120 (“evaporator”). Itoh writes, “[0041] An indoor heat exchanger 120 heat exchanges between *air blowing into a compartment* and the refrigerant. An outdoor heat exchanger 130 heat exchanges between *outdoor air* and the refrigerant” (emphasis added).

Applied Fig. 9 of Itoh does not show any duct for the radiator 130, but it does show a duct for the evaporator 120, including a blower and an air conditioning casing 300. The Itoh system is intended for an automobile, so the outdoor heat exchanger 130 would be separated from the passenger compartment by a metal firewall. The indoor heat exchanger 120 has a distinct inlet. Itoh’s paragraph 0049 states, “An air conditioning casing 300 forms a passage for air blowing into the vehicle compartment. An interior air inlet 301 for introducing indoor air and an exterior air inlet 302 for introducing outdoor air are provided [in] casing 300.”

A Claimed Difference. One difference between the Itoh heat exchanger 150 and the Applicants’ heat exchanger 34 is that the Itoh heat exchanger does not transfer heat to the air; instead, it transfers heat between two flows of refrigerant (the Examiner is referred to Itoh at paragraph 0047). Claim 1 already implied refrigerant-air heat exchangers prior to the present amendment, but now such a feature is recited more explicitly.

The Examiner replies that this is not persuasive because Lanciaux discloses a duct 144 in Fig. 12. The Examiner’s present statement renders the duct of Itoh irrelevant—Lanciaux has one already, so why bother about Itoh? But Fig. 12 of Lanciaux, like Fig. 16, fails to show any third heat exchanger, or the claimed order. There is still no third heat exchanger.

(3) Finally, the Examiner asserts that a third heat exchanger is illustrated in Fig. 15 of Lanciaux. The Examiner states, “the unnumbered element clearly embodies the notation for a heat exchanger, as recognized in the art.” This statement is highly questionable. First, what is the “unnumbered element”? From the Examiner’s statement, this element has no reference numeral: but there is no description, and it cannot be determined what it is. Second, what is a “notation for a heat exchanger” and where is it in the reference? Third, how can a mechanical

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element of a clothes dryer embody a notation? Fourth, as to "recognized in the art," is the Examiner taking Official Notice? If so, the Applicants traverse and request a reference.

The Examiner has pointed to three different views of one embodiment, but has not identified any third heat exchanger either by reference numeral or by description.

If this paper is not timely filed, please consider this paper a petition for an appropriate extension of time. Please charge any fees needed for such an extension of time, and any other fees which may be needed to enter this paper, to **Deposit Account No. 01-2340**.

Respectfully submitted,

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I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571-273-8300) on October 15, 2009.

Nick Bromer (reg. no. 33,478)

Signature

Nick Bromer